



Atty Dckt Number: 2103248-990140

#6/Amend A  
6/6/03 Gal

PATENT

- 1 -

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

BOON-SIEW OOI et al.

Application No. 09/916,701

Filed: July 26, 2001

For: METHOD OF SHIFTING THE  
BANDGAP ENERGY OF A QUANTUM  
WELL LAYER

Group Art Unit: 2812

Examiner: SAVITRI MULPURI

**RESPONSE TO OFFICE ACTION  
MAILED SEPTEMBER 30, 2002**

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**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Box, Assistant Commissioner for Patents, Washington, DC 20231, on December 27, 2002.

GRAY CARY WARE & FREIDENRICH Date: 12/27/02

By: *Kathleen LaBrie* \_\_\_\_\_  
Kathleen LaBrie

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JUN - 6 2003  
TECHNOLOGY CENTER  
2800

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the Office Action mailed on September 30, 2002, please amend the above identified application as follows:

**I. CLEAN VERSION OF CLAIMS AMENDED AND ADDED**

**A. Please cancel claims 3, 29-30, 34 and 39-46 without prejudice.**

**B. Of the two claims originally filed as "Claim 37", please renumber the second such claim as "Claim 47".**

**C. Please substitute each of the following claims for the corresponding pending claim in this application:**

1. (Amended) A method for shifting the bandgap energy of a quantum well layer comprising:  
introducing ions into a quantum well structure at an elevated temperature, wherein the quantum well structure is formed over a substrate and includes at least:  
an upper barrier layer;

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